

Title (en)

Direct cloning of PCR amplified nucleic acids

Title (de)

Direkte Klonierung von PCR amplifizierten Nucleinsäuren

Title (fr)

Clonage direct d'acides nucléiques amplifiés par réaction en chaine de la polymérase

Publication

EP 1396540 B1 20070207 (EN)

Application

EP 03023664 A 19910927

Priority

- EP 96250006 A 19910927
- EP 91919634 A 19910927
- US 58981790 A 19900927

Abstract (en)

[origin: WO9206189A1] Methods are described for producing recombinant DNA molecules from suitable host vectors and nucleic acids subjected to 3'-terminal transferase activity. In one embodiment, the method takes advantage of the single 3'-deoxy-adenosine monophosphate (dAMP) residues attached to the 3' termini of PCR generated nucleic acids. Vectors are prepared with recognition sequences that afford single 3'-terminal deoxy-thymidine monophosphate (dTMP) residues upon reaction with a suitable restriction enzyme. Thus, PCR generated copies of genes can be directly cloned into the vectors without need for preparing primers having suitable restriction sites therein. The invention also contemplates associated plasmid vectors and kits for implementing the methods.

IPC 8 full level

C12N 15/10 (2006.01); **C12N 15/66** (2006.01); **C12N 15/70** (2006.01); **C12Q 1/68** (2006.01)

CPC (source: EP US)

C12N 15/10 (2013.01 - EP US); **C12N 15/66** (2013.01 - EP US); **C12N 15/70** (2013.01 - EP US); **C12Q 1/6853** (2013.01 - EP US)

C-Set (source: EP US)

1. **C12Q 1/6853** + **C12Q 2525/101**
2. **C12Q 1/6853** + **C12Q 2521/501** + **C12Q 2521/131**

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

WO 9206189 A1 19920416; AU 8871891 A 19920428; DE 69119083 D1 19960530; DE 69119083 T2 19961017; DE 69133389 D1 20040624; DE 69133389 T2 20050602; DE 69133559 D1 20070322; DE 69133559 T2 20071122; EP 0550693 A1 19930714; EP 0550693 A4 19940427; EP 0550693 B1 19960424; EP 0738779 A2 19961023; EP 0738779 A3 19970507; EP 0738779 B1 20040519; EP 1396540 A2 20040310; EP 1396540 A3 20040609; EP 1396540 B1 20070207; EP 1790723 A2 20070530; EP 1790723 A3 20081022; HK 1064124 A1 20050121; US 5487993 A 19960130; US 5827657 A 19981027

DOCDB simple family (application)

US 9107147 W 19910927; AU 8871891 A 19910927; DE 69119083 T 19910927; DE 69133389 T 19910927; DE 69133559 T 19910927; EP 03023664 A 19910927; EP 07002538 A 19910927; EP 91919634 A 19910927; EP 96250006 A 19910927; HK 04106903 A 20040910; US 11931393 A 19930909; US 68323796 A 19960718